

ECONOMIC GROWTH

It refers to the increase of economic goods and services produced by the people in a given period time. It can measure through different methods such as **GDP (Nominal and Real)** or a particular aspect such as **Market Basket, Consumer Price Index, GDP Deflator, and Inflation Rate.**

1. **First Level:**
The connection of Elasticity to Individual Level of market response of the consumer.
Market Basket- a fixed list of consumer goods and services that is used to measure inflation in an economy or a specific market.

Below is the example computation:

Market Basket of Goods	Market Basket for 2018 (Base Year)			Market Basket 2019 (Current Year)		
	Quantity	Price	Total	Quantity	Price	Total
Pencil	5 pcs.	P40	P200	5 pcs.	P42	P210
Yellow Pad	2 pads	P45	P90	2 pads	P46	P92
Pilot(G-tech)	5 pcs.	P350	P1,750	5 pcs.	P352	P1760
knapsack	1 bag	P1,000	P1000	1 bag	P1,100	P1,100
	Total MB for 2018(BY)		P3,040	Total MB for 2019(CY)		P3,162

2. **Second Level:**
Consumer Price Index (CPI) - a price index measuring the value of a basket of goods bought by a typical consumer.

Example computation:

CPI= $\frac{\text{Price of Market Basket in Current Year}}{\text{Price of Market Basket in Base Year}} \times 100$

CPI on Base Year itself

CPI= $\frac{P3040}{P3040} \times 100$

=304000/3040

CPI=100

CPI on Current Year and Base Year

CPI= $\frac{P3162}{P3040} \times 100$

= 316200/3040

CPI = 104

Inflation Rate- It refers to an overall increase in the Consumer Price Index, which is weighted average of prices for different goods.

Inflation rate= $\frac{CPI_{\text{current year}} - CPI_{\text{base year}}}{CPI_{\text{base year}}} \times 100$

= $\frac{104 - 100}{100} \times 100$

=400/100

Inflation Rate= 4%

3. Third Level:

Gross Domestic Product (GDP) - is the total value of all final goods and services produced within a country's border over a given year.
Gross National Product (GNP) – is the total value of income acquired by a country's citizens over a given year.

Formula for GDP

GDP= C+I+G+(X-M)

- 1. **C** stands for **Consumption**- spending by households on goods and services.
- 2. **I** stands for **Investment**- spending on capital equipment, inventories and structures, including household purchases of new housing.
- 3. **G** stands for **Government Purchases**- spending on goods and services by local, state, and national government.
- 4. **X-M** stands for **Net Exports**- total spending of exports minus total spending on imports.
 - 4.1 **X** stands for **Exports** – total foreign spending on domestic goods.
 - 4.2 **M** stands for **Imports**- total domestic spending on foreign goods.

List of goods and services omitted by GDP:

- 1. Intermediate goods
- 2. Underground activities both legal and illegal
- 3. Transfer Payments
- 4. Sales of used goods
- 5. Financial Transaction (stocks and bonds)
- 6. Volunteerism
- 7. Leisure

Different ways in measuring Gross Domestic Product (GDP)

- 1. **Nominal GDP** - it measures the current output times the current price.
- 2. **Real GDP** – it measures productivity that is NOT affected by rising prices.

Year	Item	Quantity	Price
2009	Desks	2	1000
	Chairs	5	500
2010	Desks	3	995
	Chairs	7	495

How to get **Nominal GDP** and **Real GDP** in 2009?

$$\text{Nominal GDP}_{2009} = \sum [\text{Output}_{\text{current year}} \times \text{Price}_{\text{current year}}]$$
$$= (2 \times 1000) + (5 \times 500)$$
$$= 2000 + 2500$$

Nominal GDP₂₀₀₉ = 4500

$$\text{Real GDP}_{2009} = \sum [\text{Output}_{\text{current year}} \times \text{Price}_{\text{base year}}]$$
$$= (2 \times 1000) + (5 \times 500)$$
$$= 2000 + 2500$$

Real GDP₂₀₀₉ = 4500

Note: In 2009

Nominal GDP is equal to Real GDP because the base year and current year is just the same.

Year	Item	Quantity	Price
2009	Desks	2	1000
	Chairs	5	500
2010	Desks	3	995
	Chairs	7	495

How to get the **Nominal GDP and Real GDP in 2010?**

$$\text{Nominal GDP}_{2010} = \sum [\text{Output}_{\text{current year}} \times \text{Price}_{\text{current year}}]$$
$$= (3 \times 995) + (7 \times 495)$$
$$= 2985 + 3465$$

Nominal GDP₂₀₁₀ = 6450

$$\text{Real GDP}_{2010} = \sum [\text{Output}_{\text{current year}} \times \text{Price}_{\text{base year}}]$$
$$= (3 \times 1000) + (7 \times 500)$$
$$= 3000 + 3500$$

Real GDP₂₀₁₀ = 6500

Note: In 2010

Nominal GDP is different from Real GDP because the price for Real GDP is based on the price given in the base year.

How to get the **Economic Growth?**

$$\% \text{ growth of RGDP} = \frac{\text{RGDP}_{\text{current year}} - \text{RGDP}_{\text{base year}}}{\text{RGDP}_{\text{base year}}} \times 100$$
$$= \frac{6500 - 4500}{4500} \times 100$$
$$= 200,000/4500$$

% growth of RGDP = 44.44%

Conclusion: The Economic Growth has risen to 44.44% from 2009 to 2010.

GDP Deflator – it is an index number that compares nominal and real GDP for a given year. It includes all domestically produced goods and services, consumer preference, and new arrival of goods and services in the market.

$$\text{GDP Deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$

INFLATION

Inflation is the increase of the general level of price for goods and services.

Causes of Inflation:

- 1. **Cost-push Inflation**- it occurs when prices increase due to increases in production costs.
 - 1.1 Scarcity of resources or raw materials
 - 1.2 Natural Disaster
 - 1.3 The increase of major production inputs
 - A. Oil for machinery and equipment
 - B. Metal for infrastructures and projects
 - 1.4 Increase of taxes
 - 1.5 Less subsidies
 - 1.6 Wartime
 - 1.7 Foreign competitors
 - 1.8 Strict regulation and compliances

- A. Sanitary inspection
- B. Environmental friendly related regulation
- C. Accreditation

- 2. **Demand-pull Inflation**- it caused by strong consumer demand for goods and services.
 - 1.1 Increase of population
 - 1.2 Increase of wages
 - 1.3 Low unemployment rate
 - 1.4 Increase of government spending on infrastructure
 - 1.5 Less interest rate for lending
 - 1.6 More supply of money
 - 1.7 Wartime
 - 1.8 Urbanization
 - 1.9 Popularity

Different types of Inflation:

- 1. **Creeping Inflation** – 3% or less 3% increase in price
- 2. **Walking Inflation** – between 4%-10% increase in price
- 3. **Galloping Inflation** – more than 10% increase in price
- 4. **Hyperinflation** – more than 50% increase in price
- 5. **Stagflation** – is also known as recession inflation or slow economic growth
- 6. **Wage Inflation** – the rise in salary or wages of the workers
- 7. **Asset Price Inflation** – the increase of stocks and real estate prices
- 8. **Core Inflation** – the increase of price for food and energy

INTERNATIONAL TRADE

It allows countries to expand their markets for both goods and services that otherwise may not have been available domestically.

- 1. **Comparative Advantage**- the ability to produced goods at low opportunity cost than other producers.
 - A. **Opportunity Cost** – It refers to the things that must be forgone to obtain something.
 - B. **Absolute Advantage**- The ability to produced goods using fewer inputs than other producers.
- 2. **Foreign Exchange**- an institution or system for dealing in the currency of other countries.
 - A. Factors that leads exchange rate to appreciate and depreciate.

A.1 Inflation Rates

Changes in market inflation cause changes in currency exchange rates. A country with a lower inflation rate than another's will see an appreciation in the value of its currency. The prices of goods and services increase at a slower rate where the inflation is low. A country with a consistently lower inflation rate exhibits a rising currency value while a country with higher inflation typically sees depreciation in its currency and is usually accompanied by higher interest rates

A.2 Interest Rates

Changes in interest rate affect currency value and dollar exchange rate. Forex rates, interest rates, and inflation are all correlated. Increases in interest rates cause a country's currency to appreciate because higher interest rates provide higher rates to lenders, thereby attracting more foreign capital, which causes a rise in exchange rates

A.3 Country's Current Account / Balance of Payments

A country's current account reflects balance of trade and earnings on foreign investment. It consists of total number of transactions including its exports, imports, debt, etc. A deficit in current account due to spending more of its currency on importing products than it is earning through sale of exports causes depreciation. Balance of payments fluctuates exchange rate of its domestic currency.

A.4 Government Debt

Government debt is public debt or national debt owned by the central government. A country with government debt is less likely to acquire foreign capital, leading to inflation. Foreign investors will sell their bonds in the open market if the market predicts government debt within a certain country. As a result, a decrease in the value of its exchange rate will follow.

A.5 Terms of Trade

Related to current accounts and balance of payments, the terms of trade is the ratio of export prices to import prices. A country's terms of trade improves if its exports prices rise at a greater rate than its imports prices. This results in higher revenue, which causes a higher demand for the country's currency and an increase in its currency's value. This results in an appreciation of exchange rate.

A.6 Political Stability & Performance

A country's political state and economic performance can affect its currency strength. A country with less risk for political turmoil is more attractive to foreign investors, as a result, drawing investment away from other countries with more political and economic stability. Increase in foreign capital, in turn, leads to an appreciation in the value of its domestic currency. A country with sound financial and trade policy does not give any room for uncertainty in value of its currency. But, a country prone to political confusions may see a depreciation in exchange rates.

A.7 Recession

When a country experiences a recession, its interest rates are likely to fall, decreasing its chances to acquire foreign capital. As a result, its currency weakens in comparison to that of other countries, therefore lowering the exchange rate.

A.8 Speculation

If a country's currency value is expected to rise, investors will demand more of that currency in order to make a profit in the near future. As a result, the value of the currency will rise due to the increase in demand. With this increase in currency value comes a rise in the exchange rate as well.

B. Multilateral Trade Agreements

- B.1 **GATT**- General Agreement on Tariffs and Trade
- B.2 **NAFTA**- North American Free Trade Agreement
- B.3 **EU**- European Union
- B.4 **WTO**- World Trade Organization
- B.5 **APEC**- Asia- Pacific Economic Cooperation